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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,852	07/21/2005	Adolf Kaser	PD/3-22827/A/PCT	9185
324 7590 04/03/2008 JoAnn Villamizar Ciba Corporation/Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591				
EXAMINER KHAN, AMINA S				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
04/03/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/542,852

**Applicant(s)**

KASER ET AL.

**Examiner**

AMINA KHAN

**Art Unit**

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 11 and 12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 11 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date 10/24/2005

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacroix (US 4,111,650) in view of Pedrazzi (US 5,665,871).

Lacroix teaches dyeing paper pulp with compositions comprising 15-50, preferably 20-25 % % dyes of the instantly claimed formula (1), water, 8-12% N-methylpyrrolidone, 4-6% benzyl alcohol, and 4-5% formic acid (column 1, lines 5-40; column 2).

Lacroix does not teach compositions comprising  $\epsilon$ -caprolactam or 0.5-3% inorganic salts.

Pedrazzi, in the analogous art of dyeing paper pulp, teaches the functional equivalence of adding  $\epsilon$ -caprolactam and N-methyl-2-pyrrolidone to paper pulp dyeing

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compositions comprising the instantly claimed dyes of formula (1) (column 1, lines 50-67; column 4, lines 40-56). Furthermore, Pedrazzi teaches adding sizing agents such as aluminum sulphate to the compositions to produce brilliantly blue-dyed paper (column 5, lines 5-15).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute  $\epsilon$ -caprolactam for N-methyl-2-pyrrolidone in the compositions of Lacroix because Pedrazzi teaches their functional equivalence as additives in paper pulp dyeing compositions to produce papers with excellent light fastness and high brilliance. It would have been further obvious to incorporate aluminum sulphate into the compositions of Lacroix and optimize this concentration for maximal sizing benefit to the instantly claimed proportions because Pedrazzi teaches this compound as efficient in producing brilliantly blue-dyed paper.

4. Claims 1-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lacroix (US 4,111,650) in view of Wunderlich (US 5,489,330).

Lacroix teaches dyeing paper pulp with compositions comprising 15-50, preferably 20-25 % % dyes of the instantly claimed formula (1), water, 8-12% N-methylpyrrolidone, 4-6% benzyl alcohol, and 4-5% formic acid (column 1, lines 5-40; column 2).

Lacroix does not teach compositions comprising  $\epsilon$ -caprolactam or 0.5-3% inorganic salts.

Wunderlich, in the analogous art of dyeing paper pulp, teaches the functional equivalence of adding  $\epsilon$ -caprolactam and N-methyl-2-pyrrolidone as solubility enhancers to paper pulp dyeing compositions comprising the dyes very similar to the instantly claimed dyes of formula (1) (column 1, lines 25-50; column 2, lines 45-55; column 3, lines 35-50). Furthermore, Wunderlich teaches adding sizing agents such as aluminum sulphate to the compositions to produce uniformly dyed brilliantly turquoise paper (column 4, lines 1-44).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute  $\epsilon$ -caprolactam for N-methyl-2-pyrrolidone in the compositions of Lacroix because Wunderlich teaches their functional equivalence as additives in paper pulp dyeing compositions to enhance solubility. It would have been further obvious to incorporate aluminum sulphate into the compositions of Lacroix and optimize this concentration for maximal sizing benefit to the instantly claimed proportions because Wunderlich teaches this compound as efficient in producing uniformly dyed brilliantly turquoise paper.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMINA KHAN whose telephone number is (571)272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Loma M Douyon/  
Primary Examiner, Art Unit 1796

/Amina Khan/  
Examiner, Art Unit 1796  
March 30, 2008